



# Asbestos Survey And Lead Paint Survey

(Revised October 15, 2014)

## **Site:**

**Carver Elementary School  
11150 Santa Rosalia  
Stanton, CA 90680**

## **Prepared for:**

**Garden Grove Unified School District  
8211 Lampson Avenue  
Garden Grove, CA 92841**

July 16, 2013



**Cardinal Environmental Consultants, Inc.**

2691 Dow Avenue, Suite C-2

Tustin, CA 92780

(714) 730-5931

Fax (714) 730-1697

Date of report: January 8, 2013

**(Revised October 15<sup>th</sup>, 2014)**

**Asbestos Survey Investigation**

Owner/Client:

Garden Grove Unified School District  
10331 Stanford Avenue  
Garden Grove, CA 92840  
(714) 663-6000

**Site Information**

Carver Elementary School  
11150 Santa Rosalia,  
Stanton CA 90680

The site consists of portable classroom buildings, multi-purpose / cafeteria building, administration building, and four standard classroom buildings. The fixed structures are constructed of stucco and wood typical of classroom construction on a concrete slab. All portable classrooms are constructed of wood on a raised foundation. The campus comprises of approximately 35,000 square feet of functional space.

**Regulatory Compliance**

On January 2, 2012 Cardinal Environmental Consultants Inc., conducted an asbestos survey of Carver Elementary School. The survey was completed in compliance with the federal AHERA (Asbestos Hazard Emergency Response Act) 40 CFR Part 763 subpart E. The Act indicates procedures for sampling and reporting of asbestos information (about the school) to students, staff, and contractors working on schools where students K through 12 are present.

Adherence to NESHAP (National Emission Standard for Hazardous Air Pollutants) has been achieved with compliance to South Coast Air Quality Management District's Rule 1403. SCAQMD is the local air quality district that regulates and monitors asbestos abatement activity in the region of the school district.

## **Sampling Methodology- Asbestos**

Cardinal Environmental Consultants Inc. used several procedures from visual assessments to tactile assessments and a modified random sampling protocol to collect the samples of the suspect asbestos containing material. Cardinal's sampling procedures incorporate the use of plastic Ziploc bags, labeled with black permanent markers per a unique numbering sequence. One label with the suspect samples collected for this report was given a unique sample identification number. A second description was placed on the bulk sample log. Information about the sample, including the sample type and location was noted on the sheet as each sample was collected.

Asbestos: Any building material which contains asbestos in an amount greater than 1% by weight, area.

<1% Asbestos: Federal regulations and SCAQMD (South Coast Air Quality Management District) do not regulate asbestos at this percentage. Notifications to these agencies do not apply. However, OSHA regulations do apply. These are specific to "worker protection" issues. A contractor who is "DOSH certified" is required if removing more than a 100 square feet. Federal and State regulations do not regulate the disposal of this type of construction debris with this level of asbestos. However, your local landfill may have a "zero tolerance" for any asbestos containing debris.

## **Suspect Asbestos-Containing Materials**

Samples of suspect Asbestos-containing materials were taken throughout the interior and exterior of the buildings. We were able to collect representative samples of all the building materials.

The following materials were tested:

- ☐ 12X12 white vinyl floor tile associated with mastic
- ☐ 9X9 brown vinyl floor tile with mastic
- ☐ Carpet mastic
- ☐ Floor leveling compound
- ☐ Brown 4" baseboard associated with mastic
- ☐ Aqua 4" baseboard associated with mastic
- ☐ White baseboard mastic
- ☐ 1X1 ceiling tile
- ☐ Plaster
- ☐ Window putty
- ☐ Chalk board mastic
- ☐ Barrier paper
- ☐ Roof mastic
- ☐ Rolled on roofing
- ☐ Air O Cell
- ☐ Exterior stucco

## Materials Tested That Do Not Contain Asbestos

The following is a list of building materials that were tested and found to not contain asbestos. This section should be used to determine components that have been tested and do not contain asbestos. The table of asbestos testing should be used to verify location.

<input type="checkbox"/> Window Putty	Throughout the School @ Windows
<input type="checkbox"/> 1 x 1 Multi Pin Hole Ceiling Tiles-	Buildings A, B, C, D
<input type="checkbox"/> 1 x 1 Large Pin Hole Ceiling Tile	Building K
<input type="checkbox"/> 1 x 1 Fissure Type Ceiling Tile	MPR Building
<input type="checkbox"/> Interior wall plaster	Buildings A, B, C, D, E, K
<input type="checkbox"/> Drywall/Mud	Buildings A, B, C, D, E, K
<input type="checkbox"/> Glue Spots	Buildings A, B, C, D, E, K
<input type="checkbox"/> Floor Leveling Compound	Throughout the School
<input type="checkbox"/> 4" Brown Baseboard with Mastic	Buildings A, B, C, D, E,
<input type="checkbox"/> 12 x 12 White Floor Tile and Mastic	At Sink Splashes in Buildings B, C, D, and Workroom K, MPR
<input type="checkbox"/> Roof Mastics (grey)	Throughout Roofs
<input type="checkbox"/> Roof Mastics (black)	Throughout Roofs
<input type="checkbox"/> Roll Roofing	Throughout Roofs
<input type="checkbox"/> Roofing Felt	Throughout Roofs
<input type="checkbox"/> Aqua Baseboard With Mastic	At Sink Splash In Buildings B, C, D
<input type="checkbox"/> Exterior Stucco	Throughout School

## Results

All samples were packaged and shipped to Patriot Laboratories an NVLAP accredited (#200358- 0) laboratory. The analysis procedure used to determine the presence of asbestos is outlined in the Code of Federal Regulations 40 CFR part 763, Section 1, Appendix A, Polarized Light Microscopy.

The following tables depict the asbestos at the school. The investigator has reviewed the results and construction of the buildings and made adjustments to the locations and the quantities based on "homogeneous areas". AHERA can require that like areas in type, construction, and use (that test positive for asbestos) be combined with other similar areas. Therefore, some areas may not be specifically tested for asbestos but be included in an area of asbestos. Likewise, an area that has tested negative for asbestos could be included in the asbestos table because of the definition of "homogeneous area".

Subsequent tables in this document depict what was sampled and the outcome of each. Those subsequent tables should be used for clarification and not for quantification of asbestos.

Asbestos:

<b>A Building (Administration)</b>		
9X9 brown vinyl floor tile with mastic	Throughout (under carpet, cabinets, walls etc...)	4,000 sf
Pipe insulation (elbows)	Throughout restrooms, janitor closets- associated with hot water system (presumed behind walls, mechanical, ceiling spaces etc...)	10 ea
Transite panels	Throughout (3'X4' Pieces)	24 ea

<b>B Building</b>		
9X9 brown vinyl floor tile or mastic	Throughout (under carpet, cabinets, walls etc...)	4,000 sf
Pipe insulation (elbows)	Throughout restrooms, janitor closets- associated with hot water system (presumed behind walls, mechanical, ceiling spaces etc...)	10 ea
Transite panels	Throughout (3X4' Pieces)	24 ea

<b>C Building</b>		
9X9 brown vinyl floor tile or mastic	Throughout (under carpet, cabinets, walls etc...)	4,000 sf
Pipe insulation (elbows)	Throughout restrooms, janitor closets- associated with hot water system (presumed behind walls, mechanical, ceiling spaces etc...)	10 ea
Transite panels	Throughout (3X4' Pieces)	24 ea

<b>D Building</b>		
9X9 brown vinyl floor tile or mastic	Throughout (under carpet, cabinets, walls etc...)	10,000 sf
Pipe insulation (elbows)	Throughout restrooms, janitor closets- associated with hot water system (presumed behind walls, mechanical, ceiling spaces etc...)	20 ea
Transite panels	Throughout (3X4' Pieces)	48 ea

<b>E Building (Multi-Purpose Building)</b>		
Pipe insulation (elbows)	Throughout restrooms, janitor closets- associated with hot water system (presumed behind walls, mechanical, ceiling spaces etc...)	20 ea
Air o cell	Throughout	50 lf
Flex collars	Mechanical room	2 ea

<b>K Building (Kindergarten)</b>		
Pipe insulation (elbows)	Throughout restrooms, janitor closets- associated with hot water system (presumed behind walls, mechanical, ceiling spaces etc....)	10 ea
Floor Mastic	Throughout (under carpet and floor tile)	2,600 sq ft
Transite panels	Throughout (3X4' Pieces)	16 ea

<b>Site Wide</b>		
Transite pipe	Throughout (underground utilities)	1,000 lf
Transite pipe	Throughout Approximately 4"-6" vent line	12 ea
Fire door	Throughout	10 ea <i>Contractor to verify scope</i>

The **ESTIMATED** quantities and locations **ARE NOT** to be used for bidding purposes. It is the sole responsibility of the contractor to verify quantities and locations of hazardous materials in the path of construction through site visits and contractual bid set documents, including, but not limited to all specifications, drawings, and addenda. Any discrepancies between the contractual bid set documentation and sit visits must be submitted in writing to the Owner or Owner's representative, **PRIOR** to bidding.

## Summary

The following summary discusses specific elements related to asbestos at Carver Elementary School.

### Carver ES

Some of the TSI has been removed in previous abatements; however elbow insulated lines are visible. Because the pipe runs disappear into wall cavities that we could not explore; we have assumed more elbow insulated lines exist. Contractors should calculate our assumptions into their bids or proposals.

Asbestos floor tile was discovered under carpet throughout all classrooms Floor tile may be discovered under cabinets and walls; once demolition has occurred.

Underground transite pipe (associated with utilities) is located at the site. The exact quantity and size is unknown. Typically, pipes are 6" in diameter and associated with water lines. In some cases, smaller 2" and 3" lines exist and are associated with electrical lines. Contractors should verify the scope of work and determine the level of impact and tailor their abatement as necessary.

### Portables

During our investigation we discovered the portables were constructed post 1985. Under AHERA (Asbestos Hazard Emergency Response Act) 40 CFR Part 763 subpart E an asbestos survey is not required.

### Further Discussion

We have included the results of all components tested. If new suspect materials are uncovered during demolition, work should stop until proper testing can be completed.

*Special note: we have compiled this survey to outline what is asbestos and NOT asbestos. However, if any questions or discrepancies arise the consultant should be notified. The regulations allow the surveyor to create "homogenous" areas (assumptions) that a contractor/contract manager is not authorized or trained to identify.*

Contractors are obligated to review the scope of work when determining the asbestos removal quantities. The table lists all of the asbestos in the building not the removal quantities. The contractor should review the plans to determine the exact removals.

Although we aggressively searched for asbestos, the contractor should be made aware of the potential of uncovering asbestos during demolition. A supervisor trained in identifying asbestos should be present at the beginning of demolition.

Date: 01/08/13

Sincerely yours,

**CARDINAL ENVIRONMENTAL CONSULTANTS INC.,  
A California Corporation**



By:

**Ronald R. McDaniel**

California Certified Asbestos Consultant #01-2865

# Diagrams



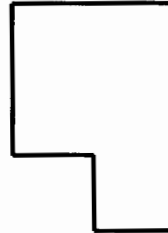
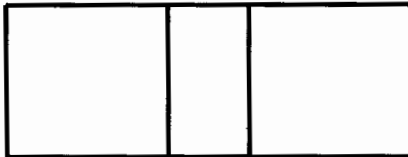
Carver Elementary School  
11150 Santa Rosalia Street  
Stanton, Ca 90680

1 3 2013

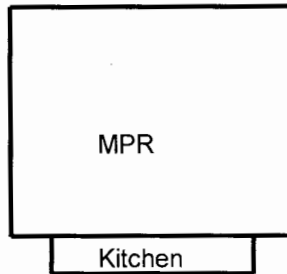
NOT TO SCALE



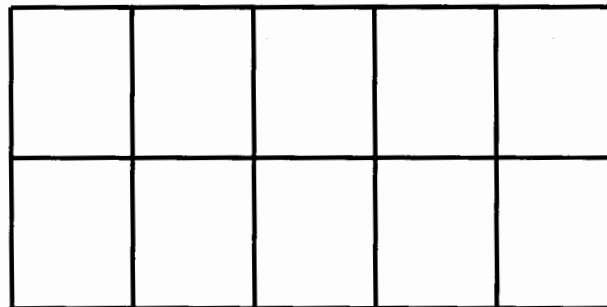
Kindergarten



Admin



☐ 9X9 and or Mastic (asbestos)  
(some under carpet or 12X12)



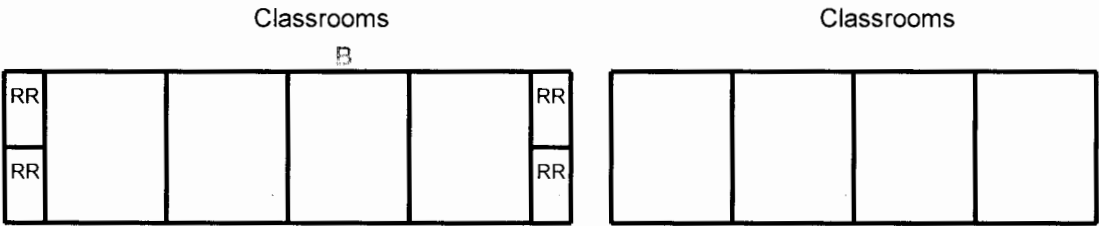
Classrooms

Contractor to verify exact amount

Carver Elementary School  
11150 Santa Rosalia Street  
Stanton, Ca 90680

1 3 2013

NOT TO SCALE



☐ 9X9 and or Mastic (asbestos)  
(some under carpet or 12X12)

Contractor to verify exact amounts

## Bulk Sample Data

Bulk Sample Data  
Table  
(Asbestos)

Cardinal Environmental  
Consultants, Inc.  
2691 Dow Avenue, Ste. C2  
Tustin, CA 92780

Date: 12/26/2012  
Client: Garden Grove Unified School District  
Location: Carver Elementary School

Technician: Ronald McDaniel

Analysis Polarized Light Microscopy  
Type: Code of Federal Regulations 40 CFR part  
763, Section 1, Appendix A

Building #	Material	Sample #	Results	F/NF	Sample Location
A (Admin)	Window Putty	CES-A-17	ND		Throughout Building A @ Windows
A	1 x 1 Multi-Pin Hole Ceiling Tile	CESA10614-1	ND		Typical on ceilings. Some 1 x 1 is used as wainscoat on walls
A	Plaster	CESA10614-2	ND		Most rooms and (walls and ceilings) are plaster. In some cases, drywall is present.
A	Glue Spot	CESA10614-3	ND		Most 1 x 1 ceiling tile is nailed at ceiling. Remaining areas have glue spots.
A	Drywall/Mud	CESA10614-4	ND		Drywall is found in some custodial and mechanical rooms.
A	Floor Leveling Compound	CES-B-03	ND ND		Tested in B. Typical in Offices, Nurse Office, Closets and Mechanical Rooms
A	4" Brown Baseboard with Mastic	CES-24	ND		See CES-24 (Throughout Admin Building) "homogeneous" material site wide
A	9 x 9 Brown Floor Tile and Mastic	CES-C-06	4% 6%	NF	Tested in C Building and homogeneous where found in buildings A, B, C, D, and F
A	3 x 4 Transite Panels		Assumed	NF	Found at window panels. "homogeneous" site wide
A	Composite Roofing	CES-23	ND		Campus roofing is homogeneous.
A	Roof Mastic	CES-21	ND		Mastic at patches/penetrations
A	Panel Mastic (markerboard)	CES-19	ND		Typical behind chalkboards/tackboards "homogeneous" material site wide
A	Exterior Plaster/Stucco	CES-E-12	ND		Typical at exterior campus "homogeneous" site wide

ND- none detect for asbestos  
NF- non-friable  
F- friable  
Chrys- chrysotile asbestos

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Analysis Polarized Light Microscopy

Type: Code of Federal Regulations 40 CFR part  
763, Section 1, Appendix A

Building #	Material	Sample #	Results	F/NF	Sample Location
A	TSI (Hot water piping)		Assumed	F	Associated with "pipe fittings" where hot water system is located. Typical all buildings with hot water.
B	9 x 9 Floor tile and Mastic	CES-C-06	4% 6%	NF	Tested in C Building and homogeneous where found in buildings A, B, C, D, and F
B	Carpet Mastic	CES-B-01	3% Chrysotile	NF	Building B Room #1 Under Carpet
B	Floor Leveling Compound	CES-B-03	ND ND		Throughout Rooms, B-901, B-902, B-903
B	12 x 12 White VFT and Mastic	CES-B-04	ND ND		At Sink Splash Areas Rooms B-901, B-902, B-903
B	Aqua Base and Mastic	CES-B-05	ND		At Sink Splash Areas Rooms B-901, B-902, B-903
B	1 x 1 Multi Pin Hole Ceiling Tile	CESB10614-5	ND		Throughout Rooms, B-901, B-902, B-903
B	Glue Spot	CESB10614-6	ND		Throughout Rooms, B-901, B-902, B-903 (homogeneous- site wide)
B	Plaster	CESB10614-7	ND		Throughout Rooms, B-901, B-902, B-903
B	Window Putty	CES-A-17	ND	NF	Tested in A Building. Homogeneous in B Building.
B	4" Brown Baseboard with Mastic	CES-24	ND		Tested in "E" building. Homogeneous at all buildings (where located).
B	3 x 4 Transite Panels		Assumed	NF	Typical at exterior campus
B	Composite Roofing	CES-23	ND		Campus roofing is homogeneous.

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Technician: Ronald McDaniel

Analysis: Polarized Light Microscopy  
Type: Code of Federal Regulations 40 CFR part  
763, Section 1, Appendix A

Building #	Material	Sample #	Results	F/NF	Sample Location
B	Roof Mastic	CES-21	ND		Mastic at patches/penetrations
B	Panel Mastic (markerboard)	GGCE102207	ND		Typical behind chalkboards/tackboards (homogeneous-site wide)
B	Exterior Plaster/Stucco	CES-E-12	ND		Typical at exterior campus
B	TSI (Hot water piping)		Assumed	F	Associated with "pipe fittings" where hot water system is located. Typical all buildings with hot water.
B	Air Cell (insulation)	CES-B-18	3%	F	Mechanical Room
C	9 x 9 Brown VFT and Mastic	CES-C-06	4% 6% Chrysotile	NF	Throughout Rooms C-904, C-905, C-906 (See ACM summary for quantities)
C	Plaster	CES-C-07	ND		Throughout Mechanical, Custodial, Bathrooms
C	1 x 1 Multi Pin Hole Ceiling Tile	CESC10614-8	ND		Throughout Rooms C-904, C-905, C-906
C	Floor Leveling Compound	CES-B-03	ND		Typical at C (throughout Rooms C-904, C- 905, C-906)
C	Window Putty	CES-A-17	ND		Tested in A Building. Homogeneous in C Building.
C	Glue Spot	CESC10614-6	ND		Glue spots typical at wainscot. ("homogeneous" at site where occurs)
C	Aqua Base and Mastic	CES-C-05	ND		Typical at C (At Sink Splash Areas Rooms C-904, C-905, C-906)
C	4" Brown Baseboard with Mastic	CES-24	ND		Typical at older rooms at C Building

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Technician: Ronald McDaniel

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Location: Carver Elementary School

Analysis: Polarized Light Microscopy

Type: Code of Federal Regulations 40 CFR part  
763, Section 1, Appendix A

Building #	Material	Sample #	Results	F/NF	Sample Location
C	3 x 4 Transite Panels		Assumed	NF	Found at window panels. "homogeneous" site wide
C	Composite Roofing	CES-23	ND		Campus roofing is homogeneous.
C	Roof Mastic	CES-21	ND		Mastic at patches/penetrations
C	Panel Mastic	GGCE102208	ND		Typical behind chalkboards/tackboards (homogeneous-site wide)
C	Exterior Plaster/Stucco	CES-E-12	ND		Typical at exterior campus
C	TSI (Hot water piping)		Assumed	F	Associated with "pipe fittings" where hot water system is located. Typical all buildings with hot water.
D	9 x 9 Floor tile and Mastic	CES-C-06	4% 6%	NF	Tested in C Building and homogeneous where found in buildings A, B, C, D, and F
D	Carpet Mastic	CES-D-08	ND		Throughout Rooms D-7, D-8, D-9, D-10, D-11, and Library D-12
D	1 x 1 Multi Pin Hole Ceiling Tile	CES-D-09	ND		Throughout Rooms D-7, D-8, D-9, D-10, D-11, and Library D-12
D	Drywall/Mud	CESD10614-9	ND		Throughout Rooms D-7, D-8, D-9, D-10, D-11, and Library D-12
D	Plaster	CESD10614-10	ND		Throughout Rooms D-7, D-8, D-9, D-10, D-11, and Library D-12
D	Floor Leveling Compound	CES-B-03	ND		Tested in B homogeneous-site wide (Throughout Rooms D-7, D-8, D-9, D-10, D-11, and Library D-12)
D	Window Putty	CES-A-17	ND		Tested in A. Homogeneous- site wide

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Justin, CA 92780

Date: 12/26/2012  
Client: Garden Grove Unified School District  
Location: Carver Elementary School

Technician: Ronald McDaniel

Analysis: Polarized Light Microscopy  
Type: Code of Federal Regulations 40 CFR part  
763, Section 1, Appendix A

Building #	Material	Sample #	Results	F/NF	Sample Location
D	Glue Spot	CESC10614-06	ND		Glue spots typical at wainscot. ("homogeneous" at site where occurs)
D	4" Brown Baseboard and Mastic	CES-24	ND		Typical at older rooms at D Building
D	3 x 4 Transite Panels		Assumed	NF	Found at window panels. "homogeneous" site wide
D	Composite Roofing	CES-23	ND		Campus roofing is homogeneous.
D	Roof Mastic	CES-21	ND		Mastic at patches/penetrations
D	Panel Mastic	GGCE102209	ND		Typical behind chalkboards/tackboards (homogeneous-site wide)
D	Exterior Plaster/Stucco	CES-E-12	ND		Typical at exterior campus
D	TSI (Hot water piping)		Assumed	F	Associated with "pipe fittings" where hot water system is located. Typical all buildings with hot water.
E (MPR)	White Base Mastic	CES-E-10	ND		Under Cove Base (Throughout)
E	12 x 12 White VFT and Mastic	CES-E-11	ND ND		Typical most flooring at E building
E	Plaster	CES-E-13	ND ND		All rooms at E Building are plaster. "plaster is homogeneous-site wide"
E	12 x 12 White VFT and Mastic	CES-E-14	ND ND		Ball Checkout Room Under Carpet
E	1 x 1 Fissure Type Ceiling Tile	CESMPR10614-11	ND		Located at ceiling and wainscot

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Technician: Ronald McDaniel

Analysis: Polarized Light Microscopy  
Type: Code of Federal Regulations 40 CFR part  
763, Section 1, Appendix A

Building #	Material	Sample #	Results	F/NF	Sample Location
E	Glue Spot	CESMPR10614-12	ND		Located at ceiling and wainscot "homogeneous-site wide"
E	Drywall/Mud	CESMPR10614-13	ND		Located at small rooms. (i.e. mechanical, etc.)
E	Plaster	CESMPR10614-14	ND		Throughout Multi-Purpose Building
E	Window Putty	CES-A-17	ND		Minimal windows in "C"
E	Floor Leveling Compound	CES-B-03	ND		Leveling compound prominent thresholds.
E	4" Baseboard with Mastic	CES-24	ND		Located at base of interior wall.
E	Composite Roofing	CES-23	ND		Campus roofing is homogeneous.
E	Roof Mastic	CES-21	ND		Mastic at patches/penetrations
E	Panel Mastic	CES-19	ND		Typical behind chalkboards/tackboards "homogeneous-site wide"
E	Exterior Plaster/Stucco	CES-E-12	ND		Typical at exterior campus
E	TSI (Hot water piping)		Assumed	F	Associated with "pipe fittings" where hot water system is located. Typical all buildings with hot water.
E	Air Cell (insulation)	CES-B-18	3%	F	Mechanical Room (sample homogeneous with Air cell-site wide)
E	Flex Collar		Assumed	F	Mechanical Room (sample homogeneous with flex collars-site wide)

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Analysis Polarized Light Microscopy  
Type: Code of Federal Regulations 40 CFR part  
763, Section 1, Appendix A

Building #	Material	Sample #	Results	F/NF	Sample Location
K (Kinder) F	Carpet Mastic	CES-F-15	3% Chrysotile	NF	Throughout Building K Under Carpet
K/F	12 x 12 VFT and Mastic	CES-F-16	ND		Workroom
K/F	1 x 1 Large Pin Hole Ceiling Tile	CESK10614-15	ND		Rooms KA-1, KB-1 and Workroom (typical at ceilings)
K/F	Glue Spot	CESK10614-16	ND		Rooms KA-1, KB-1 and Workroom Ceiling tile adhesive - wainscot
K/F	Plaster	CESK10614-17	ND		Rooms KA-1, KB-1 and Workroom, Custodian, Baths, Storage Rooms, Mechanical Rooms
K/F	Drywall/Mud	CESK10614-18	<1% Chrysotile	Point Count <.1%	Rooms KA-1, KB-1 and Workroom, Custodian, Baths, Storage Rooms, Mechanical Rooms, Point Counted to
K/F	Window Putty	CES-A-17	ND		Tested in A. (homogeneous-site wide)
K/F	Floor Leveling Compound	CES-B-03	ND		Leveling compound prominent thresholds.
K/F	4" Brown Baseboard with Mastic	CES-24	ND		Located at base of wall (homogeneous- site wide)
K/F	Composite Roofing	CES-23	ND		Campus roofing is homogeneous.
K/F	Roof Mastic	CES-21	ND		Mastic at patches/penetrations
K/F	Panel Mastic	CES-19	ND		Typical behind chalkboards/tackboards (homogeneous-site side)
K/F	Exterior Plaster/Stucco	CES-E-12	ND		Typical at exterior campus

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Location: Carver Elementary School

Technician: Ronald McDaniel

Analysis Polarized Light Microscopy  
Type: *Code of Federal Regulations 40 CFR part  
763, Section 1, Appendix A*

Building #	Material	Sample #	Results	F/NF	Sample Location
K/F	TSI (Hot water piping)		Assumed	F	Associated with "pipe fittings" where hot water system is located. Typical all buildings with hot water.
Site Wide	Transite Pipe (underground)		Assumed	NF	Transite pipe has been located (underground) at several school sites. It is assumed that transite pipe exists at this site.

ND- none detect for asbestos  
NF- non-friable  
F- friable  
Chrys- chrysotile asbestos

## Lab Results

Certificate of Analysis  
**PLM Asbestos Identification**

tel - 714-899-8900  
 free - 888-743-0998  
 fax - 714-899-7098  
 www.patriotlab.com

1041 S. Placentia Avenue, Fullerton, CA 92831



Cardinal Environmental Consultants Inc.  
 2691 Dow Ave. Ste. C2  
 Tustin, CA 92780

Report Number: 482294  
 Project Number:  
 Project Name: GGUSD Carver Elementary School MOD  
 Project Location:

Date Collected: 1/2/2013  
 Date Received: 1/3/2013  
 Date Analyzed: 1/4/2013  
 Date Reported: 1/7/2013

Collected By: Daniel Gonzales  
 Claim Number:  
 PO Number:  
 Number of Samples: 25

Lab/Client ID/Layer	Location	Material Description	Color	Composition (%)
482294-001 CES-B-01	NA	Mastic	Orange Black	71% Binder 26% Tar
Chrysotile	3 %			
<b>Total Asbestos</b>	<b>3 %</b>			
482294-002 CES-B-02	NA	Insulation	Grey	9% Cellulose 8% Mineral Wool
Chrysotile	83 %			
<b>Total Asbestos</b>	<b>83 %</b>			
482294-003 CES-B-03	NA	Plaster	Grey Beige	61% Minerals 26% Carbonate 4% Cellulose 6% Synthetic Fibers 3% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-003M CES-B-03	NA	Mastic	Black Orange	57% Binder 43% Tar
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-004 CES-B-04	NA	Floor Tile	White Grey	79% Carbonate 21% Vinyl Binder
<b>Total Asbestos</b>	<b>None Detected</b>			

Certificate of Analysis  
**PLM Asbestos Identification**

tel - 714-899-8900  
 free - 888-743-0998  
 fax - 714-899-7098  
 www.patriotlab.com

1041 S. Placentia Avenue, Fullerton, CA 92831

Cardinal Environmental Consultants Inc.  
 2691 Dow Ave. Ste. C2  
 Tustin, CA 92780

Report Number: 482294  
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 Date Reported: 1/7/2013

Collected By: Daniel Gonzales  
 Claim Number:  
 PO Number:  
 Number of Samples: 25

Lab/Client ID/Layer	Location	Material Description	Color	Composition (%)
482294-005 CES-B-05	NA	Base Cove	Blue	64% Carbonate 36% Vinyl Binder

**Total Asbestos**      **None Detected**

482294-006 CES-C-06	NA	Floor Tile	Brown	75% Carbonate 21% Vinyl Binder
------------------------	----	------------	-------	--------------------------------------

Chrysotile      4 %  
**Total Asbestos**      **4 %**

482294-006M CES-C-06	NA	Mastic	Black	94% Tar
-------------------------	----	--------	-------	---------

Chrysotile      6 %  
**Total Asbestos**      **6 %**

482294-007 CES-C-07	NA	Plaster	White Beige	71% Minerals 24% Carbonate 3% Paint 2% Cellulose
------------------------	----	---------	-------------	---

**Total Asbestos**      **None Detected**

482294-008 CES-D-08	NA	Mastic	Yellow	100% Binder
------------------------	----	--------	--------	-------------

**Total Asbestos**      **None Detected**

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Date Reported: 1/7/2013

Collected By: Daniel Gonzales  
Claim Number:  
PO Number:  
Number of Samples: 25

Lab/Client ID/Layer	Location	Material Description	Color	Composition (%)
482294-009 CES-D-09	NA	Acoustic Ceiling Tile	Orange White	96% Cellulose 4% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-010 CES-E-10	NA	Paint Chip	White Beige	100% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-011 CES-E-11	NA	Floor Tile	White	79% Carbonate 21% Vinyl Binder
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-012 CES-E-12	NA	Plaster	White Grey	71% Minerals 26% Carbonate 3% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-013 CES-E-13	NA	Plaster	White	71% Minerals 26% Carbonate 3% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-014 CES-E-14	NA	Floor Tile	White	79% Carbonate 21% Vinyl Binder
<b>Total Asbestos</b>	<b>None Detected</b>			

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Report Number: 482294  
 Project Number:  
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Date Collected: 1/2/2013  
 Date Received: 1/3/2013  
 Date Analyzed: 1/4/2013  
 Date Reported: 1/7/2013

Collected By: Daniel Gonzales  
 Claim Number:  
 PO Number:  
 Number of Samples: 25

Lab/Client ID/Layer	Location	Material Description	Color	Composition (%)
482294-015 CES-F-15	NA	Mastic	Yellow Black	60% Binder 37% Tar
Chrysotile	3 %			
<b>Total Asbestos</b>	<b>3 %</b>			
482294-016 CES-F-16	NA	Floor Tile	White	79% Carbonate 21% Vinyl Binder
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-017 CES-A-17	NA	NA	Black Green Beige	96% Vinyl Binder 4% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-018 CES-B-18	NA	Window Putty	Grey	91% Carbonate 4% Cellulose
Chrysotile	3 %			
<b>Total Asbestos</b>	<b>3 %</b>			
482294-019 CES-19	NA	Mastic	Black	100% Tar
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-020 CES-20	NA	Tar	Black Grey	89% Tar 11% Cellulose
<b>Total Asbestos</b>	<b>None Detected</b>			



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Cardinal Environmental Consultants Inc.  
2691 Dow Ave. Ste. C2  
Tustin, CA 92780

Report Number: 482294  
Project Number:  
Project Name: GGUSD Carver Elementary School MOD  
Project Location:

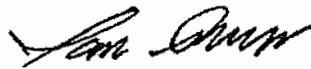
Date Collected: 1/2/2013  
Date Received: 1/3/2013  
Date Analyzed: 1/4/2013  
Date Reported: 1/7/2013

Collected By: Daniel Gonzales  
Claim Number:  
PO Number:  
Number of Samples: 25

Lab/Client ID/Layer	Location	Material Description	Color	Composition (%)
482294-021 CES-21	NA	NA	Brown Grey Black	88% Tar 12% Cellulose
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-022 CES-22	NA	NA	Orange Grey Black	74% Cellulose 26% Tar
<b>Total Asbestos</b>	<b>None Detected</b>			
482294-023 CES-23	NA	NA	Black Silver	78% Tar 18% Glass Fibers 4% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			



Peter Mai - Analyst



Ian Reyes - Approved By

Bulk sample(s) submitted was (were) analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A; EPA-600/R-93/116 (Method for Determination of Asbestos in Building Materials), and EPA-600/M4-82-020 (US EPA Interim Method for the Determination of Asbestos in Bulk Insulation Samples). Samples were analyzed using Calibrated Visual Estimations (CVES); therefore, results may not be reliable for samples of low asbestos concentration levels. Samples of wall systems containing discrete and separable layers are analyzed separately and reported as composite unless specifically requested by the customer to report analytical results for individual layers. This report applies only to the items tested. Results are representative of the samples submitted and may not represent the entire material from which the samples were collected. "None Detected" means that no asbestos was observed in the sample. "<1%" (less than one percent) means that asbestos was observed in the sample but the concentration is below the quantifiable level of 1%. This report was issued by a NIST/NVLAP (Lab Code 200358-0) and CADOHS- ELAP (Cert. No. 2540) accredited laboratory and may not be reproduced, except in full without the expressed written consent of Patriot Environmental Laboratory Services, Inc. This report may not be used to claim product certification, approval or endorsement by NIST, NVLAP, ELAP or any government agency.

482294

Cardinal Environmental Consultants Inc.  
2691 Dow Avenue, Suite C-2  
Tustin, CA 92780

## SAMPLE SUBMITTAL/CHAIN OF CUSTODY FORM

LAB NAME: Patriot Laboratories

PROJECT NAME: GGLSD; CARVER ELEMENTARY SCHOOL  
MOD

DATE: 1/2/13

TOTAL # SAMPLES: 24 23  
DG

CARRIER: Hand

TYPE:  
☒ ASBESTOS BULK  
☐ WATER  
☐ AIR  
☐ OTHER:

ANALYSIS:  
☒ PLM  
☐ TEM  
☐ OTHER

TURNAROUND:  
☐ RUSH  
☐ 24 HOUR  
☐ 48 HOUR  
☒ 72 HOUR  
☐ FIVE DAY  
☐ OTHER:

RESULTS REQUESTED:

- ☐ VERBAL (714/730-5931)  
☐ FAX (714/730-1697)

☒ E-MAIL: Daniel@CardinalEnvironmental.org  
☐ CELL: (562/652-8036) Daniel Gonzales

SAMPLE ID	SAMPLE ID	SAMPLE ID	SAMPLE ID	SAMPLE ID
CES-B-01	CES-E-11	CES-21		
02	12	22		
03	13	23		
04	14	24 DG		
05	CES-F-15			
CES-C-06	16			
07	CES-K-17			
CES-D-08	CES-B-18			
09	CES-19			
CES-E-10	20			

INSTRUCTIONS:

SAMPLES TAKEN BY: Daniel Gonzales PRINT: Daniel Gonzales DATE/TIME: 1/2/13 1000  
 SAMPLES DELIVERED BY: Daniel Gonzales PRINT: Daniel Gonzales DATE/TIME: 1/2/13 1800  
 SAMPLES RECEIVED BY: Kemp PRINT: K. Kemp DATE/TIME: 1-3-13 800 PB

1/13/13

Certificate of Analysis  
PLM Asbestos Identification

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fax - 714-899-7098  
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1041 S. Placentia Avenue, Fullerton, CA 92831



Cardinal Environmental Consultants Inc.  
2691 Dow Ave. Ste. C2  
Tustin, CA 92780

Report Number: 541830  
Project Number:  
Project Name: Carver ES  
Project Location:

Date Collected: 10/6/2014  
Date Received: 10/7/2014  
Date Analyzed: 10/9/2014  
Date Reported: 10/9/2014

Collected By: Mike McDaniel  
Claim Number:  
PO Number:  
Number of Samples: 18

Lab/Client ID/Layer	Location	Material Description	Color	Composition (%)
541830-001 CESA106 14-1	NA	NA	Brown White	95% Cellulose 5% Paint

**Total Asbestos**      **None Detected**

541830-002 CESA106 14-2	NA	NA	Beige	75% Minerals 20% Carbonate 5% Paint
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**Total Asbestos**      **None Detected**

541830-003 CESA106 14-3	NA	NA	Brown	100% Binder
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**Total Asbestos**      **None Detected**

541830-004 CESA106 14-4	NA	NA	Brown White	88% Sulfate 10% Cellulose 2% Glass Fibers
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**Total Asbestos**      **None Detected**

541830-005 CESA106 14-5	NA	NA	Grey White	20% Mineral Wool 65% Cellulose 12% Perlite 3% Paint
-------------------------------	----	----	------------	---

**Total Asbestos**      **None Detected**

Certificate of Analysis  
**PLM Asbestos Identification**

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 free - 888-743-0998  
 fax - 714-899-7098  
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1041 S. Placentia Avenue, Fullerton, CA 92831

Cardinal Environmental Consultants Inc.  
 2691 Dow Ave. Ste. C2  
 Tustin, CA 92780

Report Number: 541830  
 Project Number:  
 Project Name: Carver ES  
 Project Location:

Date Collected: 10/6/2014  
 Date Received: 10/7/2014  
 Date Analyzed: 10/9/2014  
 Date Reported: 10/9/2014

Collected By: Mike McDaniel  
 Claim Number:  
 PO Number:  
 Number of Samples: 18

Lab/Client ID/Layer	Location	Material Description	Color	Composition (%)
541830-006 CESA106 14-6	NA	NA	Brown	100% Binder
<b>Total Asbestos</b>	<b>None Detected</b>			
541830-007 CESA106 14-7	NA	NA	Beige	75% Minerals 20% Carbonate 5% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
541830-008 CESA106 14-8	NA	NA	Brown White	95% Cellulose 5% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
541830-009 CESA106 14-9	NA	NA	White	93% Carbonate 4% Paint
Chrysotile	3 %			
<b>Total Asbestos</b>	<b>3 %</b>			
541830-010 CESA106 14-10	NA	NA	Green	75% Minerals 20% Carbonate 5% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			

Certificate of Analysis  
PLM Asbestos Identification

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2691 Dow Ave. Ste. C2  
Tustin, CA 92780

Report Number: 541830  
Project Number:  
Project Name: Carver ES  
Project Location:

Date Collected: 10/6/2014  
Date Received: 10/7/2014  
Date Analyzed: 10/9/2014  
Date Reported: 10/9/2014

Collected By: Mike McDaniel  
Claim Number:  
PO Number:  
Number of Samples: 18

Lab/Client ID/Layer	Location	Material Description	Color	Composition (%)
541830-011 CESA106 14-11	NA	NA	Brown White	95% Cellulose 5% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
541830-012 CESA106 14-12	NA	NA	Brown	100% Binder
<b>Total Asbestos</b>	<b>None Detected</b>			
541830-013 CESA106 14-13	NA	NA	Brown White	88% Sulfate 10% Cellulose 2% Glass Fibers
<b>Total Asbestos</b>	<b>None Detected</b>			
541830-014 CESA106 14-14	NA	NA	Grey	75% Minerals 20% Carbonate 5% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
541830-015 CESA106 14-15	NA	NA	Brown White	95% Cellulose 5% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			

Certificate of Analysis  
PLM Asbestos Identification

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free - 888-743-0998  
fax - 714-899-7098  
www.patriotlab.com

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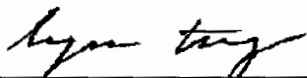
Cardinal Environmental Consultants Inc.  
2691 Dow Ave. Ste. C2  
Tustin, CA 92780

Report Number: 541830  
Project Number:  
Project Name: Carver ES  
Project Location:

Date Collected: 10/6/2014  
Date Received: 10/7/2014  
Date Analyzed: 10/9/2014  
Date Reported: 10/9/2014

Collected By: Mike McDaniel  
Claim Number:  
PO Number:  
Number of Samples: 18

Lab/Client ID/Layer	Location	Material Description	Color	Composition (%)
541830-016 CESA106 14-16	NA	NA	Brown	100% Binder
<b>Total Asbestos</b>	<b>None Detected</b>			
541830-017 CESA106 14-17	NA	NA	Grey	75% Minerals 20% Carbonate 5% Paint
<b>Total Asbestos</b>	<b>None Detected</b>			
541830-018 CESA106 14-18	NA	NA	Brown White	80% Sulfate 10% Carbonate 7% Cellulose 3% Paint
Chrysotile	<1 %			
<b>Total Asbestos</b>	<b>&lt; 1%</b>			



Lyn Terry - Analyst



Ian Reyes - Approved By

Bulk sample(s) submitted was (were) analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A; EPA-600/R-93/116 (Method for Determination of Asbestos in Building Materials), and EPA-600/M4-82-020 (US EPA Interim Method for the Determination of Asbestos in Bulk Insulation Samples). Samples were analyzed using Calibrated Visual Estimations (CVES); therefore, results may not be reliable for samples of low asbestos concentration levels. Samples of wall systems containing discrete and separable layers are analyzed separately and reported as composite unless specifically requested by the customer to report analytical results for individual layers. This report applies only to the items tested. Results are representative of the samples submitted and may not represent the entire material from which the samples were collected. "None Detected" means that no asbestos was observed in the sample. "<1%" (less than one percent) means that asbestos was observed in the sample but the concentration is below the quantifiable level of 1%. This report was issued by a NIST/NVLAP (Lab Code 200358-0) and CADOHS- ELAP (Cert. No. 2540) accredited laboratory and may not be reproduced, except in full without the expressed written consent of Patriot Environmental Laboratory Services, Inc. This report may not be used to claim product certification, approval or endorsement by NIST, NVLAP, ELAP or any government agency.



Cardinal Environmental Consultants Inc.  
2691 DOW AVE, #C-2  
Tustin, CA 92780-4318

541830

10/9 12:13 pm

## SAMPLE SUBMITTAL/CHAIN OF CUSTODY FORM

LAB NAME: Patriot PROJECT NAME: Carver ES  
DATE SHIPPED: 10-7-2014 TOTAL # SAMPLES: 18  
CARRIER: Self

**TYPE:**

☒ BULK  
☐ WATER  
☐ AIR  
☐ OTHER:

**ANALYSIS:**

☒ PLM  
☐ TEM AHERA  
☐ PCM  
☐ OTHER:

**TURNAROUND:**

☐ RUSH  
☐ 24 HOURS  
☒ 48 HOURS  
☐ 72 HOURS  
☐ FIVE DAY  
☐ OTHER:

**RESULTS REQUESTED:**

☐ FAX (714) 730-1697

**X E Mail: Mike@cardinalenvironmental.org**


**X E Mail: Ron @cardinalenvironmental.org**

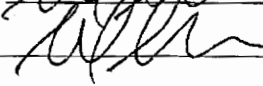
☐ OTHER

**CELL: (951) 587-5820**

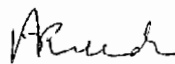
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CESA10614-1	CESD10614-9	CESK10614-17		
CESA10614-2	CESD10614-10	CESK10614-18		
CESA10614-3	CESMPR10614-11	=====		
CESA10614-4	CESMPR10614-12			
CESB10614-5	CESMPR10614-13			
CESB10614-6	CESMPR10614-14			
CESB10614-7	CESK10614-15			
CESC10614-8	CESK10614-16			

**INSTRUCTIONS:**

SAMPLES TAKEN BY: Mike McDaniel signature:  DATE/TIME: 10-6-201

SAMPLES DELIVERED BY: Mike McDaniel signature:  DATE/TIME:

SAMPLES RECEIVED BY: signature: DATE/TIME:

 10/2/14 2:13

# Lead Survey





**Cardinal Environmental Consultants, Inc.**  
2691 Dow Avenue, Suite C-2  
Tustin, CA 92780  
(714) 730-5931  
Fax (714) 730-1697

Date of report: January 3, 2013

### **Lead Paint Surface Survey**

Owner/Client:

Garden Grove Unified School District  
10331 Stanford Avenue  
Garden Grove, CA 92840  
(714) 663-6000

### **Site Information**

Carver Elementary School  
11150 Santa Rosalia,  
Stanton CA 90680

The site consists of portable classroom buildings, multi-purpose / cafeteria building, administration building, and four standard classroom buildings. The fixed structures are constructed of stucco and wood typical of classroom construction on a concrete slab. All portable classrooms are constructed of wood on a raised foundation. The campus comprises of approximately 35,000 square feet of functional space.

### **Regulatory Compliance**

The EPA and the Department of Housing and Urban Development (HUD) have established quantitative standards for lead concentration in painted surfaces. The standard for public housing, above which abatement or removal is required, is 1.0 mg/cm<sup>2</sup> or 0.5% lead by weight. No official standard exists for school buildings. Los Angeles County and L.A. Unified School District are understood to have set a standard of 0.7 mg/cm<sup>2</sup> - above which abatement is required. Currently most of the regulations relate specifically to abatement activities.

Generally, HUD (Department of Housing and Urban Development) initiated lead regulations which were then adopted by the state CDPH (California Department of Public Health).

### **Renovation, Repair and Painting Rule (RRP)**

The new regulation outlines procedures for identifying lead paint and completing abatement of lead paint. Additional requirements for certification and clearances are also addressed. Abatement activity triggers the regulation when paint systems with 1.0mg/C<sup>2</sup> or .5% are disturbed.

## Regulatory Compliance Con't

The new EPA lead regulation, 40CFR 745, *Renovation, Repair and Painting Rule (RRP)*, which became effective April 22, 2010, requires construction professionals to become "Certified Renovators" and firms to become "Certified Firms". The regulation applies to all contractors, property managers and other building professionals who disturb painted surfaces while conducting plumbing, electrical, painting, drywall, flooring, window replacement, landscaping, construction, renovation, remodeling and demolition work.

The new rule is instigated when more than six square feet of interior painted surfaces and twenty square feet of exterior surfaces are disturbed. As with HUD and the state adoption of HUD, the rule applies to lead paint systems above (1.0 mg/cm<sup>2</sup> as indicated by an XRF device or .5% by weight).

*The following is a table that outlines the regulations and requirements for each.*

	<b>Lead Levels Instigated</b>	<b>Training and certifications requirements</b>	<b>Disturbance level</b>	<b>Firm Licensing</b>
<b>Federal HUD State CDPH</b>	1.0mg/C2 or .5%	Worker training and certificate/special state certificate for supervisor	When conducting abatement to remove a lead hazard for a period of twenty years or more	CSLB license is required to conduct contract work
<b>Federal Lead Renovation Rule</b>	1.0mg/C2 or .5%	Supervisor renovator certificate/ at least "in house" training certificates for additional workers	6 sf interior and 20 sf of exterior	Contracting Firm must be Certified
<b>OSHA 1532.1</b>	600 ppm Or .06%	no certificates required	Initiated by "trigger task" to include manual demolition and sanding	No special license

### OSHA Compliance

OSHA (Occupational Safety and Health Administration) through the regulation 1532.1 further delineates requirements for lead activities. 1532.1 defines "trigger tasks" (e.g. manual demolition, etc.) that disturb lead paint and the contractor responsibilities to its employees. The regulation specifically addresses PEL's (permissible exposure limits) to staff disturbing lead paint. This regulation is initiated when "trigger task" work is implemented on paint systems with .06% or 600 ppm (parts per million). It should be noted that this level (.06%) is virtually any amount of lead paint. As of January 2002, OSHA now requires all contractors to notify the department when disturbing lead paint above 1.0mg/cm<sup>2</sup>. This level is the same threshold for abatement by HUD.

## Regulatory Compliance Con't

OSHA requires that the employer is required to protect his employees to the level stipulated in the Standard, or to do an exposure assessment. An exposure assessment is the air monitoring of an employee during lead work to determine his exposure and ultimately to determine the level of protection required. This assessment is applicable to paint systems above .06% or 600 ppm.

## Methodology

The data was developed using an X Ray Diffraction device, which reports lead content in milligrams per square centimeter of surface area (mg/cm<sup>2</sup>). The reading represents the quantity of lead between the surface and the substrate under the square centimeter of surface area contacted by the test device. If the substrate contains lead, the test result will be affected. (Galvanized metal is an example of this.) A positive reading by the XRF definitely means that lead was detected.

The test locations are described according to the following convention: Each building is considered to have an "A" side, which is closest to the main street adjacent to the school. The B-side is the first side clockwise while facing the A side, followed by the C side and the D side. This convention is followed inside and outside of the building.

Where actual samples of the material have been collected and analyzed by a laboratory, the results are reported in weight percent lead in the "comments" column of the survey table. Such data represents the sample only, and may or may not represent the entire thickness of paint on a surface. However, it definitely should not be affected by the substrate.

## Results

The survey of Carver Elementary School included 102 XRF readings, covering representative building components, substrates, and paint colors on or in the building. The lead levels in the larger paint systems are low. The higher lead levels are found in various components. (I.e. sinks, fountains...).

The following table lists the higher lead containing components that could likely require demolition and/or removal. These items would certainly require "abatement procedures" be implemented.

Subsequent tables illustrate all of the paint systems at the school site. Regulations may apply to other components with lower levels of lead. The contractor is required to review and verify the scope of work for the project and determine the impact of activities on lead painted surfaces (at any level).

*The following table lists the components that are above the HUD regulated level of 1.0 mg/cm<sup>2</sup>.*

Building	Component	Location	Quantity
B	Fountain	Exterior	1 ea
E	Ceramic tile	Interior restroom	600 sf

Building	Component	Location	Quantity
K	Fountain	Exterior	2 ea
Throughout	Beam	Interior	<i>Contractor to verify scope</i>
Throughout	Door	Interior	50 ea
Throughout	Porcelain Sink	Interior	50 ea
Throughout	Fascia	Exterior	<i>Contractor to verify scope</i>

### Summary/Recommendations

Depending on the scope of work for the project; contractors should determine the level of contractor licensing for the abatement and/or work disturbing lead paint systems.

We recommend “lead certified” painting contractors for the painting of buildings coated with lead paint. Preparation of these surfaces falls under the “trigger task” category of OSHA 1532.1. Preparation of painted surfaces and the ultimate “guarantee” of the final painted product is better completed by a “single” contractor.

RRP certified firms should be considered for incidental work that disturbs small amounts of lead paint. These categories of work may include concrete coring (through lead paint) and structure welding (door hinges etc.).

Abatement companies with CDPH (California Department of Public Health) lead certified staff will be required for all abatement work. The companies selected will have to insure that a certified lead supervisor be present during abatement preparation and be within two hours (response time) during abatement activities.

Painting contractors will be required to collect all paint chips from the preparation activities. The contractor will sample and categorize the waste for disposal. Proof of sampling and waste disposal will be required.

Metal components (coated with lead paint) will likely be recycled. A letter (stating acceptance of material) will be required from the contractor’s recycling facility.

All other waste produced from abatement activities will be separated and staged in a safe storage area at the project site during the sampling process. The characterization of the waste can take up to two weeks and an area will need to be allocated for this purpose. The contractor will be required to conduct and pay all costs associated with the characterization of the waste. Copies (proof) of all characterization of waste will be demanded on completion and before waste transport.

### Final Comments

Other contractors at the site should be made aware of the lead paint issues and use “lead safe” work practices. Sand blasting, dry sanding, and torching should be restricted in these areas or, if that is not feasible, use CDPH certified employees for these processes.

## Lead Tables

# Garden Grove Unified School District

## Lead Survey

Carver Elementary School

Inspection Date: 1/4/2013

Bldg.	Location	Component	Substrate	Color	Lead Mg/cm2	Comments
K	A Int	Wall	Wood	White	0.02	K-A
	"	Window Sill	Wood	White	0.03	"
	"	Window Frame	Wood	White	0.03	"
	"	Beam	Wood	White	0.05	"
	C Int	Door Frame	Wood	White	0.01	"
	"	Door	Wood	Green	0.00	"
	D Int	Sink	Porcelain	White	44.60	"
	"	Wall	Plaster	White	0.12	Little Boys Bath
	"	Toilet	Porcelain	White	0.02	"
	"	Cabinet	Wood	White	0.00	"
	"	Sink	Porcelain	White	3.50	"
	C Ext	Window Frame	Wood	White	0.05	Slider
	"	Window Frame	Wood	White	0.02	"
	"	Window Sill	Wood	White	0.02	"
	"	Wall	Stucco	White	0.01	"
	"	Drinking Fountain	Porcelain	White	41.70	"
	"	Door	Wood	Green	1.40	"
	"	Door Frame	Wood	Green	0.05	"
	A Ext	Facia	Wood	Green	1.70	"
	"	Beam	Wood	Green	0.07	"
	"	Eave	Wood	White	0.40	"
	"	wall	Wood	White	0.10	"
	"	Fire Box	Metal	White	0.40	"
	"	Vent	Metal	White	0.40	"
A	D Int	Window Frame	Wood	White	0.12	Office
	"	Wall	Wood	White	0.01	"
	A Int	Door	Wood	White	0.01	Interior Door
	"	Door Frame	Wood	White	0.00	Interior Door
	"	Door	Wood	Green	0.02	Office
	"	Door Frame	Wood	White	0.02	"
	C Int	Sink	Porcelain	White	32.00	Lounge
	"	Window Frame	Wood	White	0.06	"
	D Int	Wall	Plaster	White	0.06	Nurse Bath
	C Int	Cabinet	Wood	White	0.00	Nurse Office
	A Ext	wall	Wood	White	0.13	
	"	Window Sill	Wood	White	0.09	
	"	Window Frame	Wood	White	0.07	
	"	Wall	Stucco	White	0.00	
	A Ext	Facia	Wood	Green	2.70	
	"	Eave	Wood	White	0.13	
	"	Cover	Wood	White	0.00	Walkway
	"	Cover Support	Wood	White	0.00	"
	"	Drip Cap	Metal	Green	0.00	"
Bldg.	B Ext	Facia	Wood	Green	1.80	
	"	Eave	Wood	White	0.05	
	"	Drinking Fountain	Porcelain	White	42.30	

# Garden Grove Unified School District

## Lead Survey

**Carver Elementary School**

**Inspection Date: 1/4/2013**

Bldg.	Location	Component	Substrate	Color	Lead Mg/cm2	Comments
B	B Int	Partition	Metal	Blue	0.02	Boys Bath
	"	Wall	Plaster	White	0.21	"
	"	Toilet	Porcelain	White	0.01	"
	"	Urinal	Porcelain	White	0.02	"
	"	Sink	Porcelain	White	0.05	"
	A Ext	Beam	Wood	Green	0.02	Room 1
	"	Window Frame	Wood	White	0.10	"
	"	<b>Door</b>	<b>Wood</b>	<b>Green</b>	<b>1.80</b>	"
	"	Door Frame	Wood	Green	0.01	"
	"	Fire Box	Metal	White	0.01	"
	"	Vent	Metal	White	0.40	"
	<b>C Int</b>	<b>Sink</b>	<b>Porcelain</b>	<b>White</b>	<b>40.10</b>	"
	"	Window Frame	Wood	Stain	0.01	"
	"	Wall	Wood	Stain	0.06	"
	"	Beam	Wood	Stain	0.02	"
	A Int	Window Frame	Wood	White	0.03	"
	"	Door Frame	Wood	White	0.03	"
	<b>D Ext</b>	<b>Drinking Fountain</b>	<b>Porcelain</b>	<b>White</b>	<b>31.40</b>	
	C Ext	Window Panel	Transite	Green	0.01	
	"	Window Frame	Wood	White	0.00	
	"	<b>Beam</b>	<b>Wood</b>	<b>Green</b>	<b>1.70</b>	
	"	Wall	Stucco	White	0.00	
	<b>A Ext</b>	<b>Facia</b>	<b>Wood</b>	<b>Green</b>	<b>1.70</b>	
	"	Eave	Wood	White	0.06	
	"	<b>Door</b>	<b>Wood</b>	<b>Green</b>	<b>1.40</b>	Room 4
	"	Door Frame	Wood	Green	0.01	"
	"	Fire Box	Metal	White	0.17	"
	"	Vent	Metal	White	0.00	"
	<b>C Int</b>	<b>Sink</b>	<b>Porcelain</b>	<b>White</b>	<b>46.50</b>	"
	B Int	Wall	Wood	Stain	0.01	"
	A Int	Cabinet	Wood	Stain	0.00	"
	"	Window Frame	Wood	White	0.01	"
	"	Door Frame	Wood	White	0.03	"
D	C Ext	Wall	Stucco	White	0.00	
	"	<b>Facia</b>	<b>wood</b>	<b>Green</b>	<b>0.80</b>	
	"	Beam	Wood	Green	0.01	
	"	Eave	Wood	White	0.30	
	"	Window Panel	Transite	Green	0.02	Room 8
	"	<b>Door</b>	<b>Wood</b>	<b>Green</b>	<b>1.40</b>	"
	<b>A Int</b>	<b>Sink</b>	<b>Porcelain</b>	<b>White</b>	<b>41.20</b>	"
	"	Wall	Wood	White	0.01	"
	B Int	Heater	Metal	tan	0.05	"
	"	Beam	Wood	Stain	0.00	"
E	A Ext	Wall	Stucco	White	0.01	
	"	Facia	Wood	Green	0.19	
	"	Beam	Wood	green	0.02	

## Lead Survey

**Inspection Date: 1/4/2013**3